



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: AS907-2-1A (HTF7350) BYPASS RATIO: 4.2
UNIQUE ID NUMBER: 01P14HN011 PRESSURE RATIO (π_{co}): 22.9
COMBUSTOR: SABER-1
ENGINE TYPE: MTF RATED THRUST (F_{co}) (kN): 33.0

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO _x	SMOKE NUMBER
D _p /F _{co} (g/kN) or SN	2.9	81.7	48.2	15.0
AS % OF ORIGINAL LIMIT	14.6	69.2	56.2	46.6
AS % OF CAEP/2 LIMIT (NO _x)			70.2	
AS % OF CAEP/4 LIMIT (NO _x)			71.6	
AS % OF CAEP/6 LIMIT (NO _x)			72.3	
AS % OF CAEP/8 LIMIT (NO _x)			76.9	

For non-volatile particulate matter (nvPM) emissions, please refer to the ICAO Engine nvPM Emissions Data Sheet.

DATA STATUS

- PRE-REGULATION
x CERTIFICATION
- REVISED (SEE REMARKS)

TEST ENGINE STATUS

- NEWLY MANUFACTURED ENGINES
x DEDICATED ENGINES TO PRODUCTION STANDARD
- OTHER (SEE REMARKS)

EMISSIONS STATUS

x DATA CORRECTED TO REFERENCE
(ANNEX 16 VOLUME II)

CURRENT ENGINE STATUS

(IN PRODUCTION, IN SERVICE UNLESS OTHERWISE NOTED)

- OUT OF PRODUCTION (DATE: -)
- OUT OF SERVICE (DATE: -)

MEASURED DATA

MODE	POWER SETTING (%F _{co})	TIME (minutes)	FUEL FLOW (kg/s)	EMISSIONS INDICES (g/kg)	HC	CO	NO _x	SMOKE NUMBER
TAKE-OFF	100	0.7	0.373	0.05	0.58	18.79	13.6	
CLIMB OUT	85	2.2	0.309	0.06	0.59	16.64	10.6	
APPROACH	30	4.0	0.107	0.12	5.98	9.03	0.8	
IDLE	7	26.0	0.048	1.00	30.90	3.98	1.6	
LTO TOTAL FUEL (kg) or EMISSIONS (g)			157	81	2501	1503	-	
NUMBER OF ENGINES				3	3	3	3	
NUMBER OF TESTS				10	10	10	10	
AVERAGE D _p /F _{co} (g/kN) or AVERAGE SN (MAX)				2.5	75.6	45.5	13.6	
SIGMA (D _p /F _{co} in g/kN, or SN)				0.5	3.8	2.3	1.6	
RANGE (D _p /F _{co} in g/kN, or SN)				1.89-3.49	69.73-80.58	39.57-47.26	9-13.6	

ACCESSORY LOADS

POWER EXTRACTION 0 (kW) AT - POWER SETTINGS
STAGE BLEED 0 (% CORE FLOW) AT - POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	96.4-97.6
TEMPERATURE (K)	296-313
ABS HUMIDITY (kg/kg)	0.0013-0.0125

FUEL

SPEC	Jet A
H/C	1.87-1.89
AROM (%)	16.9-20.5

MANUFACTURER: Honeywell
TEST ORGANIZATION: Honeywell
TEST LOCATION: Phoenix, AZ
TEST DATES: 07/04/2010-29/07/2010

NO_x REGULATION PARAGRAPH

	2.3.2 c) (CAEP/4)
	2.3.2 d) (CAEP/6)
x	2.3.2 e) (CAEP/8)

REMARKS

- Reference: Honeywell Report 21-14930(29)-1
- Exhaust Smoke and Gaseous Emissions Similarity Analysis for the AS-907-2-1A Turbofan Engine
- Certification in accordance with Part III, Chapter 2, of Amendment 7 of ICAO Annex 16 Vol. II.
- NO_x levels in accordance with Part III, Chapter 2, 2.3.2 e) (CAEP/8)

Compliance with Fuel Venting requirements:

x ('x' if complies, 'PR' if pre-regulation, '- ' if information is not available)